

REMARKS

Claims 1-18 are pending. Claims 1-18 stand rejected in this Office Action. Applicant requests reconsideration of claims 1-18 as will be discussed.

Applicant acknowledges the withdrawal of the objection to the specification.

Claim Rejections – 35 U.S.C. § 103

Claims 1-2, 4-11, and 13-18 are rejected under 103 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,727,161 (Purcell), U.S. Patent No. 5,727,950 (Cook). U.S. Patent No. 5,372,507 (Goleh), “Software Usability: Choosing Appropriate Methods for Evaluating Online Systems and Documentation” (Mehlenbacher), “Rapid Prototyping: An Alternative Instructional Design Strategy” (Tripp), “Software Engineering Concepts” (Fairley), “A Case Study Using Scenario-Based Design Tools and Techniques in the Formative Evaluation Stage of Instructional Design: Prototype Evaluation and Redesign of a Web-Enhanced Course Interface” (Turner).

Regarding independent claims 1 and 10, Purcell, Cook, Goleh, Mehlenbacher, Tripp, Fairley, and Turner, either individually or in combination, fail to suggest the feature of “a transformation component providing services for manipulating the state of the simulation, wherein the transformation component performs at least one calculation on the domain and **provides a result back to the domain for further analysis by the profiling component.**”¹ (Emphasis added.) The Office Action admits that the combination of Purcell and Goleh fails to explicitly teach this feature. (Page 6.) The Office Action further alleges that Cook teaches (Page 7.):

... a transformation component providing services for manipulating the state of the simulation, wherein the transformation component performs at least one calculation on the domain and provides a result back to the domain for further analysis by the profiling component (C5-63 especially i.e. "sets global variables ...

¹ As an example, the specification recites “For example, if the financial statements of a company are stored in the domain, the domain would hold the baseline data like how much cash the company has, what its assets and liabilities are, etc. The Transformation Component would be able to look at the data and calculate additional values like cash flow ratios, ROI or NPV of investments, or any other calculations to quantitatively analyze the financial health of the company. Depending on their complexity, these calculations could be performed by pre-existing spreadsheets that a client has already spent considerable time developing.” (Page 10, lines 35-39.)

updating the student data object" C35L40-60 or "transforms display actions into displays to the student" C55L25-35 or "updating student data object" C55L35-47 or "in the student data model, the current lesson subtype and materials specific data subtype are updated, if necessary, with data from the input event message. For example, upon item completion, performance results need to be updated" C55L45-C56 L45 or "Action weighting ..." or C55L40-65 or "rule propagation and general production rule systems could be used to transform events to actions" C57L55-65); ...

Cook recites (Column 35, lines 41-56. Emphasis added.):

Agent processing is divided into two components, agent action processing 609, which determines agent display actions in response to events, and agent behavior processing 612, **which transforms display actions into displays of personae to the student**. In a preferred embodiment, agent action processing is rule based and event driven. Rules in rules tables 610 are evaluated using parameters both communicated in event messages from the materials or the student and retrieved from the student data object. These rules propose candidate actions and then weigh and select a final set of agent actions from the candidates, which are communicated to subsequent agent behavior processing 612. Agent processing also sets global variables for materials sequencing and control. A side effect of this processing is the updating the student data object with information from the materials event message.

Cook merely discusses transforming display actions into displays to personae to the student. For example, personae 506 (as shown in fig. 4) is activated to engage the student's attention. (Column 26, lines 52-53.) However, Cook fails to suggest any thing about analyzing the transformed displays. Cook also recites (Column 55, lines 27-46. Emphasis added.):

Agent processing is divided into agent action processing, which determines on-screen agent display actions in response to input events, and agent behavior processing, which **transforms display actions into displays** to the student. In a preferred embodiment, agent action processing is rule based and event driven, and agent behavior processing is table based. This and the succeeding section describe the preferred embodiments of these divisions of agent processing.

FIG. 8 illustrates in more detail agent action processing. This processing is activated when event messages 801, representing either input events sent from the I/O handlers or educationally meaningful messages from the materials, are sent to the agent software. It **transforms the input event messages into lists of display actions** that activate the agent display and also has the important side effects of updating student data object 806, as indicated by arrow 815, and of setting materials control parameters, as indicated by arrow 816. It is possible a particular input event can generate all or none of these outputs and side effects.

Cook merely discusses transforming display actions into displays and transforming input event messages into lists of display actions but fails to suggest the analysis of the displays or list of display actions. Moreover, Mehlenbacher, Tripp, Fairley, and Turner fail to remedy the deficiencies of Purcell, Cook, and Goleh.

Independent claim 10 includes the similar feature of “a transformation component providing services for manipulating the state of the simulation, wherein the transformation component performs at least one calculation on the domain and provides a result back to the domain for further analysis by the profiling component.” Moreover, claims 2, 4-9, 11, and 13-18 ultimately depend from independent claims 1 and 10. Applicant requests reconsideration of claims 1-2, 4-11, and 13-18.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell, Goleh, Cook, Mehlenbacher, Tripp, Fairley, and Turner in view of U.S. Patent No. 4,847,784 (Clancey).

Claims 3 and 12 ultimately depend from claims 1 and 10. Because Clancey does not remedy the deficiencies of Purcell, Goleh, Cook, Mehlenbacher, Tripp, Fairley, and Turner, claims 3 and 12 are patentable for at least the above reasons.

All objections and rejections have been addressed. Hence, it is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited.

Respectfully submitted,

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